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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,573	02/12/2001	William R. Bandy	1689.0070001	1620

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EXAMINER

PYZOCHA, MICHAEL J

ART UNIT PAPER NUMBER

2137

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/780,573	BANDY ET AL.	
	Examiner	Art Unit	
	Michael Pyzocha	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 13-24 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-24 and 31-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12202004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claims 1-6, 13-24, and 31-41 are pending.
2. The amendment of 11/1/2004 has been received and considered.

***Drawings***

3. In view of the amendments to the specification, the objection to the drawings made in the previous Office action is hereby withdrawn.

***Specification***

4. In view of the amendments to the specification, the objection to the specification made in the previous Office action is hereby withdrawn.

***Claim Objections***

5. In view of the amendments to claim 39, the objection to the claim made in the previous Office action is hereby withdrawn.

***Claim Rejections - 35 USC § 112***

6. In view of the amendments to claims 1 and 38, the rejection made in the previous Office action is hereby withdrawn.

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**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaish et al (U.S. 5,974,150).

As per claims 1 and 19, Kaish et al discloses reading a first pattern marking an article (see column 27 lines 20-24). Encoding the pattern into a data set (see column 27 lines 24-28). Transforming the first data set into a second data set (see column 27 lines 28-30). Converting the second data set into a second pattern (see column 27 lines 32-40). Marking the article with the pattern (see column 27 lines 24-25 see also column 26 lines 19-24 where the encoding is making the pattern a description and the transforming is the encrypting).

As per claims 2 and 20, Kaish et al discloses the data sets being numeric sequences (see column 27 lines 24-30).

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As per claims 3 and 21, Kaish et al discloses the use of an encryption algorithm (see column 22 lines 38-42).

As per claims 4 and 22, Kaish et al discloses the use of a bar code (see column 22 line 38 and column 27 lines 38-40).

As per claims 5 and 23, Kaish et al discloses one pattern being invisible (see column 21 lines 44-47 where the dye is used on the dichroic fibers).

As per claims 6 and 24, Kaish et al discloses the use of infra-red light spectrum (see column 21 lines 44-47 where the dye is used on the dichroic fibers).

3. Claims 13-17 and 31-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Coppersmith et al (U.S. 6,069,955).

As per claims 13 and 31, Coppersmith et al discloses reading, converting and comparing the data sets (see column 3 lines 53-59).

As per claims 14 and 32, Coppersmith et al discloses the data sets being numeric sequences (see column 3 lines 31-35 where the labels being read are these serial numbers).

As per claims 15 and 33, Coppersmith et al discloses the use of an encryption algorithm (see column 3 lines 41-43).

As per claims 16 and 34, Coppersmith et al discloses the use of a bar code (see column 4 lines 47-49).

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As per claims 17 and 35, Coppersmith et al discloses one of the patterns being invisible (see column 3 lines 47-48).

4. Claims 37-38 and 40-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al (U.S. 6,748,533).

As per claim 37, Wu et al discloses a marking representing a data set and a second marking representing another data set with a relationship between the two data sets (see column 12 lines 58-67).

As per claim 38, Wu et al discloses an invisible marking (see column 13 lines 1-4).

As per claim 40, Wu et al discloses the relationship defined by encryption (see column 12 line 65 through column 13 line 1).

As per claim 41, Wu et al discloses the use of a framing image (see column 12 lines 50-53).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coppersmith et al as applied to claims 13 and 31 above, and further in view of Liang (U.S. 5,867,586).

Coppersmith fails to disclose the use of the infra-red light spectrum.

However, Liang discusses discloses the use of the infra-red light spectrum (see column 2 lines 58-61).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the infra-red light spectrum of Liang with the system of Coppersmith.

Motivation to do so would have been a method to apply invisible markings to an article (see column 2 lines 58-61).

7. Claims 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al as applied to claim 37 above, and further in view of Liang.

Wu et al fails to disclose the use of the infra-red light spectrum.

However, Liang discusses discloses the use of the infra-red light spectrum (see column 2 lines 58-61).

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the infra-red light spectrum of Liang with the system of Coppersmith.

Motivation to do so would have been a method to apply invisible markings to an article (see column 2 lines 58-61).

### ***Response to Arguments***

8. Applicant's arguments filed 11/1/2004 have been fully considered but they are not persuasive.

Applicant argues Kaish (US 5974150) fails to teach "transforming said first data set into a second data set" as in claims 1 and 19. Applicant argues that Coppersmith (US 6069955) fails to teach "comparing said first and second data sets to each other" as in claims 13 and 31. Applicant argues Wu (US 6748533) fails to teach a "randomly generated marking to generate a first data set" as in claim 37. Applicant also argues the secondary references in the 35 U.S.C. 103 rejections also fail to teach the above-mentioned limitations.

Regarding Applicant's arguments towards Examiner's rejection under Kaish, the reference teaches a transforming of a first data set into a second data set (see column 26 lines 19-24 where the encrypting step is the transformation).



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Regarding Applicant's arguments on the deficiencies of Coppersmith, Applicant states the Coppersmith teaches "comparing a visible label to a first public key and a hidden label to a second public key." Applicant is referred to Coppersmith column 3 lines 52-58 where Coppersmith discloses "examining the visible label **using** public key 109" and similarly for the hidden label to verify the authenticity.

Regarding Applicant's argument stating Wu fails to teach a "randomly generated marking to generate a first data set," Applicant is directed to Wu column 12 lines 58-67 where the "Name of Country" is encrypted and an encrypted set of data is a randomly generated set of data.

Regarding Applicant's arguments to Examiner's rejections under 35 U.S.C. 103, the above discussions show how the primary references disclose the deficiencies argued by Applicant.

### **Conclusion**

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANDREW CALDWELL**  
**SUPERVISORY PATENT EXAMINER**

MJP